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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,676	11/18/1999	GREGORY T. HULAN	PDNO-1099181	6250
22879	7590	12/14/2004	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			POON, KING Y	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/442,676

Applicant(s)

HULAN, GREGORY T.

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 12 is rejected under 35 U.S.C. 102(e) as being anticipated by Jamzadeh (US 5,889,578).

Regarding claim 12: Jamzadeh teaches an apparatus (fig.1, column 3, line 43) for scanning an image (column 3, line 53) and printing copies of the image (column 7, lines 19-25, fig. 8A, fig. 8B) on a sheet, (sheet, column 7, line 50) the apparatus comprising: a scan module; (film scanner 32, fig. 1); a print module (laser writer, 52, fig. 1); an input device (operator interface, column 8, line 17) for allowing a one or more

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photo size (4R, 5R, or 8R, column 7, lines 55-67, column 8, lines 1-17) to be selected (column 8, line 43); and means (image data manager/IDM 30, column 3, line 44; IDM controls the system including the scanner, column 3, lines 42-47) for causing the scan module (scanner, column 3, line 51) to scan the original image, (second scan for the selected image, column 7, lines 19-25, column 4, lines 1-3), the means (IDM 30, column 3, line 44) automatically (the resolution of the scanned image used in the interpolation, column 8, lines 1-16 is determined automatically by the IDM from the selected enlargement size, column 7, lines 33-36, column 3, lines 55-63) determining an actual size (the number of pixels of the scanned image, column 8, lines 8-16) of the scanned image (the scanned pixels) and scaling (scaling the number of pixels of the scanned image to the number of pixels of the printed image by interpolation, column 8, lines 8-17) copies (copies, column 8, line 55, e.g., fig. 8A) of the scanned image (pixels) to the photo size (e.g., 4R, column 7, line 50, column 8, line 13) selected via the input device, the means (IDM 30 controls the printer 60 which includes the laser writer, fig. 1, column 3, lines 44-47) also causing the print module (laser writer, 52, fig. 1) to print the copies on the sheet (column 7, lines 26, 33).

Note: Column 7, lines 19-30, teaches once the scanned image is stored to make a full page print, the printing begins. For example, when a user selects to print nine 4R copies of a selected image, which will make a full page print, column 7, lines 49-52; the printing begins after the selected image is scanned and stored.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh as applied to claim 12 above, and further in view of Hicks (US 4,862,200).

Regarding claim 13: Jamzadeh teaches different photo size is to be printed on an additional sheet, (Column 7, lines 44-53) i.e., one size of photo is to be printed on a first copy and a second size photo is to be printed on a second copy. Jamzadeh also teaches all different photo size is to be scales from the scanned images to the respective printed photo size (column 7, lines 55-68, column 8, lines 1-15)

Jamzadeh does not teach wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Hick, in the same area of printing photographs, teaches an input device (a code button, column six, lines 45) allows a Photo Package entry (package one, column six, line 45), which contains printing instructions such as printing copies of photograph of different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column 10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected copies of photographs of different sizes.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller to include: the input device allows a Photo Package entry to be selected, and the controller, that controls the print module, causes the print module to print copies of a different photo size when the Photo Package entry is selected.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller by the teaching of Hicks because of the following reasons: Being a competitive business, there is very little margin for additional overhead costs, and the time is of the essence. The necessity of offering to a customer a choice creates significant problems of matching a particular subject with the subject's actual photographic order (Hicks, column 40-56). Therefore, the Photo package selection would automate the printing processing by allowing copies of different photographs to be automatically generated by a single entry and thereby, reduces the problem of matching a particular subject with the subject's actual photographic order as well as overhead costs.

Since, in Jamzadeh, the different photo size is printed on an additional sheet, Jamzadeh as modified by Hicks teaches wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh as applied to claim 12 above, and further in view of Collard (US 6,236,473).

Regarding claim 14: Jamzadeh teaches to print and fill different copies of photograph(s) onto a sheet. For example, nine 4R prints will fill up a sheet with no waste, column 7, lines 49-51. Five 4R one 8R and three 4R are selected to fill a sheet with no waste, column 7, lines 55-65. Since Jamzadeh teaches to arrange copies of photograph to be printed onto a sheet with no waste, Jamzadeh teaches to utilize maximum printable area on a sheet.

Jamzadeh does not teach wherein the means rotates at least one copy to utilize maximum printable area on the sheet.

Collard, in the same area of printing images onto a sheet, teaches a control unit (column 7, lines 15-17) rotates (column 1, line 30, column 7, lines 31-32) an image such that the printed image fits the orientation of print area of a print sheet. (Column 1, lines 18-37, fig. 6B)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's controller/IDM to include: the IDM rotates the image of a copy of the photograph such that the image fits the orientation of the print area designated, for example, 8R of fig. 8A.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's controller/IDM by the teaching of Collard because of the following reasons: (a) it would have allowed pictures of different orientation to fit in the designated area of the sheet, for example, the 5R of fig. 8B would

only allow copy of photograph with orientation the same as the orientation of area designated by 5R of fig. 8B. Photographs (5R) in different orientation would not fit in the designated area without rotation; and (b) it would have reduced cost by saving paper from fitting an extra photograph onto a printable area of the paper.

Note: Jamzadeh teaches to fit copies of photograph(s) into designated areas of a sheet which utilize the maximum printable area on the sheet. After the modification, copies of photograph of different orientation are rotated to fit into the designated areas, of the sheet, which utilize the maximum printable area on the sheet. Therefore, Jamzadeh as modified by Collard teaches rotates at least one copy to utilize maximum printable area on the sheet.

6. Claims 8, 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh (US 5,889,578) in view of Hicks (US 4,862,200).

Regarding claim 8: Jamzadeh teaches an apparatus (fig.1, column 3, line 43) for scanning an image (column 3, line 53) and printing copies of the image (column 7, lines 19-25, fig. 8A, fig. 8B) on a sheet, (sheet, column 7, line 50) the apparatus comprising: a scan module; (film scanner 32, fig. 1); a print module (laser writer, 52, fig. 1); an input device (operator interface, column 8, line 17) for allowing at least a first photo size, a second photo size/ a size different from the first photo size, (different sizes, column 8, line 57, for the selected image; e.g., 8R, fig. 10, or 4R, column 7, line 50) to be selected (column 8, line 43); and a controller (image data manager/IDM 30, column 3, line 44; IDM controls the system including the scanner, column 3, lines 42-47) for causing the scan module (scanner, column 3, line 51) to scan the image, (second scan for the

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selected image, column 7, lines 19-25, column 4, lines 1-3), the controller (IDM 30, column 3, line 44) automatically (the resolution of the scanned image used in the interpolation, column 8, lines 1-16 is determined automatically by the IDM from the selected enlargement size, column 7, lines 33-36, column 3, lines 55-63) determining actual size (the number of pixels of the scanned image, column 8, lines 8-16) of the scanned image (the scanned pixels) generating first scanned image copies (copies, column 8, line 55, of the interpolated pixels of the image to be printed, e.g., the 2000 dots per scan line for one copy of 4 inches prints, column 8, line 14) that are scaled (scaling the number of pixels of the scanned image to the number of pixels of the printed image by interpolation, column 8, lines 8-17) to the first photo size and different photo size, (e.g., 4R, 5R, 8R, column 7, lines 55-67, column 8, lines 1-15) and that are positioned to utilize maximum printable area on the sheet (nine 4R prints will fill up a sheet with no waste, column 7, lines 49-51. Two 4R one 8R and three 4R are selected to fill a sheet with no waste, column 7, lines 55-65. Since Jamzadeh teaches to arrange copies of photograph to be printed onto a sheet with no waste, Jamzadeh teaches to utilize maximum printable area on a sheet) and causing (IDM 30 controls the printer 60 which includes the laser writer, fig. 1, column 3, lines 44-47) the print module (laser writer, 52, fig. 1) to print the first copies on the sheet (column 7, lines 26, 33).

Note: Column 7, lines 19-30, teaches once the scanned image is stored to make a full page print, the printing begins. For example, when a user selects to print nine 4R copies of a selected image, which will make a full page print, column 7, lines 49-52; the printing begins after the selected image is scanned and stored.

Jamzadeh also teaches a second copy of different photo size is to be printed on an additional sheet, (Column 7, lines 44-53) i.e., one size of photo is to be printed on a first copy and a second size photo is to be printed on a second copy.

Jamzadeh does not teach wherein the input device allows a Photo Package entry/a packet that include different photo size to be selected, and wherein the controller causes the print module to print copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Hick, in the same area of printing photographs, teaches an input device (a code button, column six, lines 45) allows a Photo Package entry (package one, column six, line 45), which contains printing instructions such as printing copies of photograph of different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column 10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected copies of photographs of different sizes.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller to include: the input device allows a Photo Package entry to be selected, and the controller, that controls the print module, causes the print module to print copies of a different photo size when the Photo Package entry is selected.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller by the teaching of Hicks because of the following reasons: Being a competitive business,

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there is very little margin for additional overhead costs, and the time is of the essence.

The necessity of offering to a customer a choice creates significant problems of matching a particular subject with the subject's actual photographic order (Hicks, column 40-56). Therefore, the Photo package selection would automate the printing processing by allowing copies of different photographs to be automatically generated by a single entry and thereby, reduces the problem of matching a particular subject with the subject's actual photographic order as well as overhead costs.

Since, in Jamzadeh, the different photo size is printed on an additional sheet, Jamzadeh as modified by Hicks teaches wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Regarding claim 9: Jamzadeh teaches wherein the input device (operator interface, column 8, line 17) prompts for additional standard sizes. (e.g., 8R, 10R, fig. 10)

7. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh in view of Hicks as applied to claim 8 above, and further in view of Ishikawa et al. (US 6,183,933)

Regarding claim 7: Jamzadeh does not teach wherein the apparatus is an All-in-One machine. Ishikawa teaches a film scanner, (column 63, line 55) a computer, (column 63, line 56) a printer, (column 63, line 56) and a user interface (monitor and

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keyboard, column 64, lines 30-31) are constituted as an All-in-One machine. (House in a single case, column 63, lines 54)

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh's scan module/scanner, print module/printer, input device/user interface, and controller/computer to form an All-in-One machine.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh's apparatus by the teaching of Ishikawa because of the following reasons: (a) it would have simplified the system; and (b) it would have provided users with convenient because carrying/moving one unit is easier compare to carrying/moving four units.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jamzadeh (US 5,889,578) in view of Hicks (US 4,862,200) Yamada (US 4,847,662) and Collard (US 6,236,473).

Regarding claim 11: Jamzadeh teaches an apparatus (fig.1, column 3, line 43) including a scan module, (film scanner, 32, fig. 1) a print module, (laser printer 52, fig. 1) an input device, (keyboard 29, fig. 1) a display device, (the device that used for displaying by the IDM 30, column 7, line 15) and a processor, (image data manager/IDM 30, column 3, line 44, IDM is used to control the whole apparatus, column 3, lines 42-50), the processor comprising processing sequence of: displaying (fig. 9) a Photo features entry (menu options to be selected by operator, column 8, lines 37-51)

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on the display device; commanding the scan module (film scanner 32, fig. 1) to perform a pre-scan (column 3, line 58) when the Photo Features entry is selected (the pre-scan is used to locate an image frame as requested by the operator using user interface, column 5, lines 25-33, column 7, lines 9-17, column 8, lines 43-51, fig. 7) via the input device (keyboard are for user input, column 9, lines 60-65); automatically (IDM computer automatically detects frame line of a frame, column 5, lines 3-10 to locate the frame for second scan, column 5, lines 23-27) determining an actual size (the frame line determines the physical extent/size of the frame used for second scan) of an output (the boundary information of a frame in the scanned pixels, column 5, lines 3-10) of the scan module after the prescan is performed; commanding the scan module to perform a full scan (second scan, column 7, lines 19-23, column 3, lines 64-69, column 4, lines 1-3); generating scaled (scaling the number of pixels of the scanned image to the number of pixels of the printed image by interpolation, column 8, lines 8-17) copies (copies, column 8, line 55, e.g., copies of photograph of fig. 8A, fig. 8B) of an output (scanned pixels from second scan, e.g., column 8, lines 8-16) of the scan module after the full scan is performed, the copies being scaled to a size or different size indicated by the selected entry (e.g., 4R, 5R, 8R, column 7, lines 55-67, column 8, lines 1-15); utilizing maximum printable area on the sheet (nine 4R prints will fill up a sheet with no waste, column 7, lines 49-51. Two 4R one 8R and three 4R are selected to fill a sheet with no waste, column 7, lines 55-65. Since Jamzadeh teaches to arrange copies of photograph to be printed onto a sheet with no waste, Jamzadeh teaches to utilize maximum printable area on a sheet) and causing (IDM 30 control the printer 60 which includes the

laser writer, fig. 1, column 3, lines 44-47) the print module (laser writer, 52, fig. 1) to print the copies on the sheet (column 7, lines 26, 33).

Note: Column 7, lines 19-30, teaches once the scanned image is stored to make a full page print, the printing begins. For example, when a user selects to print nine 4R copies of a selected image, which will make a full page print, column 7, lines 49-52; the printing begins after the selected image is scanned and stored.

Jamzadeh also teaches different photo size is to be printed on an additional sheet. (Column 7, lines 44-53), i.e., one size of photo is to be printed on a first copy and a second size photo is to be printed on a second copy.

Jamzadeh does not teach wherein the input device allows a Photo Package entry to be selected, and wherein the controller causes the print module to print copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Hick, in the same area of printing photographs, teaches an input device (a code button, column six, lines 45) allows a Photo Package entry (package one, column six, line 45), which contains printing instructions such as printing copies of photograph of different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column 10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected copies of photographs of different sizes.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and

controller to include: the input device allows a Photo Package entry to be selected, and the controller, that controls the print module, causes the print module to print copies of a different photo size when the Photo Package entry is selected.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh's input device and controller by the teaching of Hicks because of the following reasons: Being a competitive business, there is very little margin for additional overhead costs, and the time is of the essence. The necessity of offering to a customer a choice creates significant problems of matching a particular subject with the subject's actual photographic order (Hicks, column 40-56). Therefore, the Photo package selection would automate the printing processing by allowing copies of different photographs to be automatically generated by a single entry and thereby, reduces the problem of matching a particular subject with the subject's actual photographic order as well as overhead costs.

Since, in Jamzadeh, the different photo size is printed on an additional sheet, Jamzadeh as modified by Hicks teaches wherein the input device allows a Photo Package entry to be selected, and wherein the means causes copies of a different photo size to be printed on an additional sheet when the Photo Package entry is selected.

Jamzadeh/Hicks does not teach wherein the processor rotates the copies if necessary to utilize maximum printable area on the sheet.

Collard, in the same area of printing images onto a sheet, teaches a control unit (column 7, lines 15-17) rotates (column 1, line 30, column 7, lines 31-32) an image, if

necessary, such that the printed image fits the orientation of print area of the sheet.  
(Column 1, lines 18-37, fig. 6A, not rotated because it is not needed to be rotated to fit a printable area of a sheet, and fig. 6B, rotated to fit a printable area of a sheet)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Hicks's controller/IDM to include: the IDM rotates the images of the copies of the photograph, if necessary, such that the images fit the orientation of the print area designated; for example, 5R of fig. 8B.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Hicks's controller/IDM by the teaching of Collard because of the following reasons: (a) it would have allowed pictures of different orientation to fit in the designated area of the sheet, for example, the 5R of fig. 8B would only allow copy of photograph with orientation the same as the orientation of area designated by 5R of fig. 8B. Photographs in different orientation would not fit in the designated area (5R) without rotation; and (b) it would have reduced cost by saving paper from fitting an extra photograph onto a printable area of the paper.

Note: Jamzadeh teaches to fit copies of photograph(s) into designated areas of a sheet which utilizes the maximum printable area on the sheet. After the modification, copies of photograph of different orientation are rotated to fit into the designated areas, of the sheet, which utilize the maximum printable area on the sheet. Therefore, Jamzadeh as modified by Collard teaches rotates at least one copy to utilize maximum printable area on the sheet.

Jamzadeh, as modified by Collard/Hicks still do not teach a computer memory for storing a program used to control the processor to carry out the processing sequence.

Yamada, in the same area of using a controller (CPU, column 4, line 67, with a ROM, column 5, line 2) for: controlling a scanner ( reader, column 5, lines 5-6) according to data set by an operator, and a printer unit, (column 5, lines 5-8); teaches storing (column 5, line 2) the processing sequence for the processor in controlling the scanner and the printer in a computer memory (ROM, column 5, line 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Collard/Hicks' controller/IDM to include: a computer memory for storing a program used to control the controller to carry out the processing sequence.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Jamzadeh/Collard/Hicks controller/IDM by the teaching of Yamada because of the following reasons: (a) using a program to control a controller would have allowed the controller to be manufactured in large quantities because the same controller would be programmed to perform different functions for other devices, for example, the same kind of controller programmed to be used in a printer would also be programmed and used in a camera. Producing the controller in large quantities reduces the cost of the controller; and (b) storing the program would have prevented losing the processing sequence of the controller.

### ***Response to Arguments***

9. Applicant's arguments filed on 7/9/2004 have been fully considered but they are not persuasive.

With respect to applicant's argument that the controller does not automatically determine actual size of the scanned image, has been considered.

In reply: Jamzadeh teaches an apparatus (fig.1, column 3, line 43) for scanning an image (column 3, line 53) and printing copies of the image (column 7, lines 19-25, fig. 8A, fig. 8B) on a sheet, (sheet, column 7, line 50) the apparatus comprising: a scan module; (film scanner 32, fig. 1); a print module (laser writer, 52, fig. 1); an input device (operator interface, column 8, line 17) for allowing a one or more photo size (4R, 5R, or 8R, column 7, lines 55-67, column 8, lines 1-17) to be selected (column 8, line 43); and means (image data manager/IDM 30, column 3, line 44; IDM controls the system including the scanner, column 3, lines 42-47) for causing the scan module (scanner, column 3, line 51) to scan the original image, (second scan for the selected image, column 7, lines 19-25, column 4, lines 1-3), the means (IDM 30, column 3, line 44) automatically (the resolution of the scanned image used in the interpolation, column 8, lines 1-16 is determined automatically by the IDM from the selected enlargement size, column 7, lines 33-36, column 3, lines 55-63) determining an actual size (the number of pixels of the scanned image, column 8, lines 8-16) of the scanned image (the scanned pixels).

With respect to applicant's argument that Hicks does not teach a package selection to instruct copies of a different photo size to be scaled and printed on an additional sheet has been considered.

In reply: Hick, in the same area of printing photographs, teaches an input device (a code button, column six, lines 45) allows a Photo Package entry (package one, column six, line 45), which contains printing instructions such as printing copies of photograph of different sizes, to be selected, (column six, lines 20-25, column six, lines 44-50) and stored in a memory. (Column 6, lines 57-60) The instructions are transferred (column 10, lines 15-20, column 11, lines 25-28, lines 35-43) to a printer for printing the selected copies of photographs of different sizes.

Since Jamzadeh teaches to select and print different photo size (fig. 8A, fig. 8B, column 7, lines 45-55), the photo package entry would allowed the different photo size of Jamzadeh to be selected by one single selection to save time.

Jamzadeh further teaches different photo size is to be printed on an additional sheet, (Column 7, lines 44-53) i.e., one size of photo is to be printed on a first copy and a second size photo is to be printed on a second copy. Jamzadeh also teaches all different photo size is to be scales from the scanned images to the respective printed photo size (column 7, lines 55-68, column 8, lines 1-15).

With respect to applicant's argument that the examiner neglect to address claim 11 in a detail action, has been considered.

In reply: The examiner has rejected claim 10 in the office action mailed on 3/2/2004 and the rejection to claim 10 is for claim 11. The examiner has made a typing error. The examiner has indicating that the rejection is based on the assumption that the applicant has made a typing error while presenting the claims. In page 2 and page 3 of the detail action mailed on 3/2/2004, the examiner has point out to the applicant

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that the examiner is not sure whether the limitation "a scan module to print copies of a different photo size" is a mistake made by the applicant. The examiner has made two phone calls to Mr. Richard E. Billion, applicant's representative, but cannot resolve the issue. In the detail office action mailed 5/6/2003, the examiner has stated very clearly that the limitations of "a scan module to print copies of a different photo size" in claim 11 is allowable, and the specification is amended to reflect that. I.e., claim 11 cannot be rejected based on the amendment filed on 8/4/2003 without the examiner's assumption.

From the present amendment, it appears (by changing a scan module to print to a print module to print) that claim 11, is incorrectly presented in the amendment filed on 8/4/2003. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. A detailed action to the corrected claim 11 has been presented in this office action.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

December 8, 2004

A handwritten signature in black ink, appearing to read 'King Y. Poon', written in a cursive style.

**KING Y. POON  
PRIMARY EXAMINER**